Partner Meeting

Best Practices for SF_6 Inventories and Emission Reductions
New Developments in Climate Change Policy

May 13-14, 2010
Energy Plaza, Rm. 2-157
1601 Bryan Street
Dallas, Texas

Draft Meeting Agenda

May 13, 2010

8:00 AM **Registration and Continental Breakfast**

9: 00 AM **Introduction and Welcome**
- Review of Meeting Objectives and Sessions, Sally Rand, EPA
- Welcome Remarks, Deborah Boyle, Vice President of Environment, Health, Safety and Training, Oncor

9:30 AM **<u>Session 1:</u> Domestic Climate Policy Highlights**
- US Legislative Policy Updates, Michael Tubman, Pew Center on Global Climate Change
- Update on EPA Climate Protection Rulemakings and Policies, Sally Rand, EPA
- Update on California Regulations, Michelle Garcia, California Air Resources Board

11:00 Coffee Break

11:15 AM **<u>Session 2:</u> SF_6 in The Atmosphere**
- Using Top-Down Measurements to Inform Public Policy, Dr. Bradley Hall, NOAA

11:45 AM **<u>Session 3</u>: Mandatory Reporting Update**
- SF_6 Emission Reporting Requirements under the Proposed GHG Mandatory Reporting Rule, *Sally Rand, EPA*

12:30 PM **Lunch**

1:30 PM **<u>Session 4:</u> SF_6 Inventories**
- Inventorying and Determining Nameplate Capacity Estimates, Paul Stewart, ICF International

<u>Table Discussion 1:</u> SF_6 Inventories

Moderator: *Mollie Averyt, ICF International*

This Partner table discussion will be an open discussion focused on SF_6 inventories. Each Partner will come prepared to speak to the questions below. Following an opening by the moderator, a mediated group

discussion will be held to allow all Partners to speak to and share ideas on methods for inventorying SF_6 gas.

Discussion Topics:

1. What challenges do you encounter in estimating nameplate capacity for individual pieces of equipment? Have you attempted to contact electrical equipment manufacturers to obtain nameplate capacities for equipment when it is not readily apparent? Are they able to provide the information you need? Or do you just recover all of the gas from equipment and then weigh the gas if you are unsure of the nameplate capacity?
2. What have you found as the most effective way to track the entire inventory of equipment to estimate total system-wide nameplate capacity? Is it essential to use inventory management software for medium and large utilities? Are there specific types of inventory-management software that work better than others?
3. Have you found that the actual amount of SF_6 that a piece of equipment holds when fully charged is different from what you previously thought based on its recorded nameplate capacity? How common is it to adjust the estimated nameplate capacity for an individual piece of equipment, either because of misunderstandings of the true nameplate capacity or because of past alterations to the equipment?
4. With what frequency do you record your mass-balance inputs? Is monthly mass-balance input recording helpful in ensuring good recordkeeping?
5. How is the cylinder inventory prepared? Do you have a central storage area where all cylinders are stored when they are not being used? How are cylinders identified? Is the weight of each cylinder stored in a database in real-time? What is your procedure for weighing cylinders: before and after each use, or on a periodic schedule?
6. How many scales does your utility own? What type of scales are used at your utility and what is their accuracy/precision? Are scales for weighing cylinders transportable?
7. How are inventory practices and procedures developed, stored, updated, and made available so they can be effectively implemented by current staff and passed on to new staff in the future?
8. What strategies are being used to incorporate relatively small switchgear into your inventories to prepare for mandatory reporting?
9. How should equipment be treated that is delivered to utility but not yet installed?
10. Are there any other challenges that you have had in measuring inputs to the mass-balance and estimating overall emissions?

3:00 PM **Coffee Break**

3:15 PM **Session 4: Table Discussion 1 resumes**

4:15 PM **Energy Efficiency Initiatives at Oncor,** Price Robertson, Oncor

5:30 PM – 7:30 **Reception hosted by Oncor at the Fairmont Hotel**

May 14, 2010

7:30 AM **Continental Breakfast**

8:30 AM **Session 5: Table Discussion 2 - Mitigation Strategies - Best Management Practices for SF_6 Emission Reductions**
Moderator: Mike Hamilton, Oncor

This Partner table discussion will be an open discussion focused on best management practices and mitigation strategies for SF_6 emission reductions. Each Partner will come prepared to speak to the questions below. Following an opening by the moderator, a mediated group discussion will be held to allow all Partners to speak to and share ideas on best management practices and mitigation strategies for SF_6 emission reductions.

Discussion Topics:

1. What techniques and sealants does your company use to address leak repair?
2. What are your company's decision criteria for repair versus replacement?
3. How do you and/or your staff approach the challenge of receiving approval and funding for making expensive purchases for equipment repair and/or replacement?
4. Have you been able to substitute non-SF_6 insulated equipment for equipment that did contain SF_6? Is there any R&D going into new strategies for using less SF_6 or emitting less?
5. How can software be used to effectively prioritize which breakers are in the most need of attention?
6. How have you ensured that the appropriate fittings are used on equipment to prevent leaks and ease future maintenance of the equipment?
7. What is the best way to train field crews on how to properly handle gas? How frequent do staff receive refresher courses? Also, do you provide field crews with materials that they can use on the spot when performing maintenance?
8. How is breaker maintenance handled during the peak load summer months? Do you conduct extra maintenance or repair activities in the spring to prepare for summer months?
9. In the past, Partners have noted that it can be difficult to identify leaks on GIS buses inside substations, and one Partner said that FLIR is working on a laser attachment for cameras. Have you had issues spotting leaks on GIS gear using leak-detection cameras? Do you have any strategies for identifying leaks on GIS equipment?
10. What has been your most effective strategy for reducing SF_6 emissions? Are SF_6 emission reductions recognized in the overall GHG emission reduction strategy by your company?

10:00 AM **Coffee Break**

10:15 AM **Session 6: Table Discussion 2 resumes**

11:00 AM **<u>Session 7: Planning Session</u> - The Future for the Partnership**
Moderator: Sally Rand, EPA

This session will provide an opportunity for Partners to discuss scope of activities and resources they need from the EPA Partnership to help them make further emission reductions and improve emissions inventories. Also an opportunity to provide feedback to EPA on future policies and measures discussed in Session 1.

12:00 PM **Boxed Lunch**

12:30 PM **Bus departs to Oncor's Parkdale Switchyard and SVC Site Tour**

2:30 PM **Site Tour concludes**

3:00 PM **Bus arrives back at Energy Plaza**